to profess to supply what so many have felt to be wanting, and yet have not been able to furnish. The subjects to be discussed, however, require us to make the attempt. While we endeavour to disentangle a web which appears to many to be so complicated, and hope thereby to throw some light on the connexion of God with his works, we are at the same time convinced that many of the conclusions to be drawn, in the subsequent parts of this book, are to a great extent independent of any particular theory which may be formed or preferred in regard to the precise nature of general laws, or the relation between cause and effect.

In reflecting, with the view of determining its nature, upon the Material world—and we wish it to be remarked that in this book we treat of nothing but the Material world—we are led at the very first glance to see that it is composed of a number of substances, simple and compound, possessing properties. We do not require to enter upon the metaphysics of substance and quality; we are not to defend, nor are we to impugn, either the popular view on the one hand, or the various philosophic theories on the other. We assume, what all must assume—except absolute sceptics, who are beneath, or transcendental idealists, who are above the reach of evidence—that there are material substances possessing properties. Nor are we in this treatise to speak of those properties of matter by which it affects the mind through the nervous system and brain. These are important objects of inquiry, but they do not fall to be prosecuted in this place, in which we confine ourselves to a topic which will be found to be sufficiently wide—the mode of action of the Physical world.

In contemplating matter with the view of discovering its qualities, we cannot avoid perceiving that, first of all, it possesses the property of extension, or rather that of occupying space. This property was regarded as its essential quality by

Descartes; and it certainly does seem to us to be an essential constituent of our cognition of matter, and implied in all its actual operations.*

* See Sir William Hamilton's analysis of this quality, and also remarks on the dynamical theory of matter in APPENDIX II. ON THE QUALITIES OF MATTER

Modern physical investigation has entirely set aside the idea, still lingering among metaphysicians, that extension is the only essential quality of matter: dynamical energy is also essential. On the other hand, the dynamical theory of matter commonly overlooks extension, and errs besides in regarding the powers of matter as mere *forces*, (a word of limited signification,) whereas they *forties* with a vast variety (^ *kinds* of action.